

November 17, 2006

Presentation Overview

- Background and Overview
- Proposed Amendments
- Overall Impacts of Proposal
- Comments
- Proposed Modifications
- Recommendation

Background and Overview



State Law Defines Consumer Products

- Chemically formulated products
- Used by household and institutional consumers
- Includes personal care, automotive care, and household care products



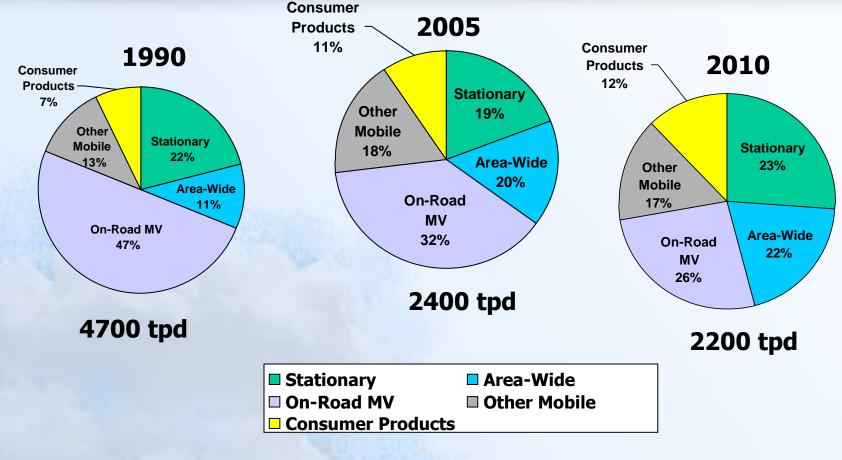
State Law Mandates Control of Consumer Products with Limitations

- Achieve maximum feasible reduction in VOCs
- Technologically and commercially feasible regulations
- Preserve product forms
- Consult with public health experts on health benefit products

Existing Regulations

- Five regulations adopted since 1989
- 112 product categories regulated
- 170 tons per day emission reductions
- Regulated category emissions reduced 50%
- Some toxic air contaminants prohibited

Statewide VOC Emissions: 1990-2010



Ave

Source: 2006 ARB Almanac, Annual Average Statewide VOC Emissions



Consumer Products are a Significant VOC Emission Category

Currently

- 2nd largest in SCAQMD
- 6th largest in SJVAPCD

2023

- 1st largest in SCAQMD
- 3rd largest in SJVAPCD

Proposed Amendments



VOC Limit Development

- 250 product categories
- 26,000 products surveyed
- Created database
 - Analyzed surveys
 - -Entered data
 - Quality control

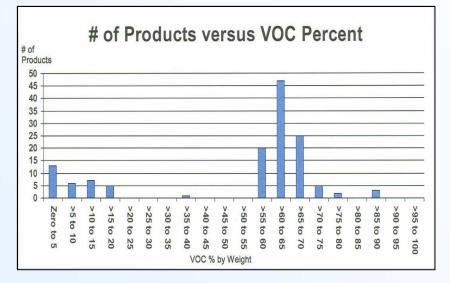
VOC Limit Development (cont.)

- Data analysis
 - Assessed VOC emissions per category
 - Analyzed product labels
 - Patent, literature, and technology reviews
 - 50 categories evaluated for regulation
 - 15 categories proposed for regulation

VOC Limit Development (cont.)

Factors Considered for Proposed Limits

- VOC distribution
- Types of products and product forms
- Average VOC content
- Complying market share
- Number of complying products
- Technology transfer
- Patent limitations
- Health benefit
- Potential use of TACs to reformulate



Automotive Cleaning and General Degreasing Research

- ARB sponsored research
- Transfer of water-based technology used in parts washers to aerosol form
- Categories:
 - Brake Cleaners
 - Carburetor or Fuel-Injection Air Intake Cleaners
 - Engine Degreasers
 - General Purpose Degreasers
- Results approved by Research Screening Committee



Proposed Amendments

- New VOC limits for 15 categories
- Clarify definitions
- Clarify overlapping requirements
- Prohibit toxics in 4 categories
- Adjust VOC limit for Nail Polish Removers
- Exempt certain Electronic Cleaners

Categories with New Proposed VOC Limits

Product Category	Proposed VOC Limit (wt%)	Effective Date
Automotive Care Products		
Automotive Windshield Washer Fluid		
Type "A" Areas	25	12/31/2008
Brake Cleaner	10	12/31/2008
Carburetor or Fuel-Injection Air Intake Cleaner	10	12/31/2008
Engine Degreaser	10	12/31/2008
Cleaners, Degreasers/Disinfectants		
Bathroom and Tile Cleaner		
Non-aerosol	1	12/31/2008
Oven Cleaner		
Non-aerosol	1	12/31/2008

Categories with New Proposed VOC Limits (cont.)

Product Category	Proposed VOC Limit (wt%)	Effective Date
Cleaners, Degreasers/ Disinfectants (cont.)		
Disinfectant		
Aerosol	70	12/31/2008
Non-Aerosol	1	12/31/2008
General Purpose Cleaner		
Aerosol	8	12/31/2008
General Purpose Degreaser		
Aerosol	10	12/31/2008
Sanitizer		
Aerosol	70	12/31/2008
Non-aerosol	1	12/31/2008

Categories with New Proposed VOC Limits (cont.)

Product Category	Proposed VOC Limit (wt%)	Effective Date
Adhesives		
Construction, Panel, and Floor Covering Adhesive	7	12/31/2008
Fabric Care Product		
Laundry Starch/Sizing/Fabric Finish Product	4.5	12/31/2008
Personal Care Product		
Temporary Hair Color		
Aerosol	55	12/31/2010

Categories with New Proposed VOC Limits (cont.)

Product Category	Proposed VOC Limit (wt%)	Effective Date
Waxes & Polishes		
Furniture Maintenance Product:		
Non-Aerosol	3	12/31/2008
Floor Polish or Wax		
Resilient flooring material	1	12/31/2010
Non-resilient flooring material	1	12/31/2010

Prohibit Use of Chlorinated Toxic Air Contaminants

- Methylene Chloride, Perchloroethylene, and Trichloroethylene
 - Bathroom and Tile Cleaners
 - Construction, Panel, Floor Covering Adhesives
 - General Purpose Cleaners
 - Oven Cleaners

Overall Impacts of Proposal



Emissions Reductions

	VOC (tpd)
	2012
Statewide	11.7
South Coast Air Basin	5.0
San Joaquin Valley Air Basin	1.2
Remaining Air Districts	5.5

Environmental Impacts

Prevents toxics increase

- No significant adverse impacts
- Efficacy of health benefit products maintained

Economic Impacts

- Average \$2.35 per pound VOC reduced
- Estimated average cost to produce is \$0.06 per unit
- Compares favorably with other consumer products regulations

Comments



Comments

- Numerous comments received
- 10% VOC limits for Automotive Cleaning and General Degreasing are not feasible by 12/31/2008
- Definition changes to Rubber and Vinyl Protectants
- Floor Polish or Wax subcategories
- Electronic Cleaner subcategory
- Disinfectant and Sanitizers exclusion

Proposed Modifications



Proposed 15-day Changes

- Automotive Cleaning and General Purpose Degreasing Categories
- Rubber/Vinyl Protectants
- Disinfectants and Sanitizers

Electronic Cleaners

Automotive Care Products

	Proposed VOC Limit (wt%)	Effective Date
Brake Cleaners, Carburetor and	20	12/31/2008
Fuel-Injection Air Intake Cleaners, General Purpose Degreasers	10	12/31/2012
Engine Degreasers	10	12/31/2010

Summary

- 11.7 tons per day VOC reductions statewide
- Technologically and commercially feasible
- Product forms preserved
- Cost effective
- Prohibits exposure to toxic air contaminants

Recommendation

 Adopt staff's proposed amendments and modifications